Robert Hooke

Robert Hooke FRS (18 July 1635 – 3 March 1703) was an English polymath who was active as a scientist, natural philosopher and architect in London during the Restoration. He was given the curatorship of experiments by the Royal Society of London in 1662, and was appointed Gresham Professor of Geometry in 1665. He was also elected a Fellow of the Royal Society in 1663 and was its secretary from 1677 to 1682. Hooke lived a reclusive life and never married. His adult life was dominated by his rivalry with Isaac Newton, who was president of the Royal Society from 1703 to 1727.

Contents
Early life
Architecture
Microscopy
Natural philosophy and astronomy
Personality
Bibliography
Notes

Early life

Hooke was born in Freshwater on the Isle of Wight, the son of John Hooke, a Church of England priest, and Cecily Gyllard. He was educated at Lord Zouche's free school in Hadleigh, Essex, and at Westminster School, where he was a chorister under Dr Richard Busby. He showed an early aptitude for mechanical things, and built a model windmill and a model of the flight of the rooks from the roof of the school. He also showed an interest in drawing and painting, and was apprenticed to the painter Peter Lely for a short time. He entered Christ Church, Oxford, in 1653 as a chorister and assistant to Thomas Willis. He graduated with a BA in 1663 and an MA in 1665.

Architecture

Hooke's architectural career began after the Great Fire of London in 1666. He was appointed City Surveyor and was responsible for the rebuilding of many churches, including St Mary-le-Bow, St Stephen Walbrook, and St Bride's Church. He also designed the Monument to the Great Fire of London, which is a 202-foot (62 m) tall Doric column. Hooke's architectural style was influenced by the Baroque style of Christopher Wren, but he also developed his own distinctive style, which is characterized by the use of large windows, simple geometric forms, and the extensive use of brick.

Hooke's most famous architectural work is the Monument to the Great Fire of London. It was designed to commemorate the Great Fire of London, which destroyed much of the city in 1666. The Monument is a 202-foot (62 m) tall Doric column, and it is topped with a gilded urn. The Monument is located on Fish Street Hill, near the site of the bakery where the Great Fire began. It is a popular tourist attraction, and visitors can climb to the top for a fee.

Microscopy

Hooke was a pioneer in the use of microscopy. He published his observations in his book Micrographia, which was published in 1665. The book contains detailed drawings of insects, plants, and other objects that Hooke observed through his microscope. Micrographia was a popular success, and it helped to establish the microscope as a valuable tool for scientific research.

Hooke's microscope was a compound microscope, which means that it used two lenses to magnify the object being observed. He used a variety of lenses, including both convex and concave lenses. He also used a variety of illumination techniques, including candlelight and sunlight. Hooke's microscope was a significant improvement over earlier microscopes, and it allowed him to see much more detail in the objects he observed.

Natural philosophy and astronomy

Hooke was a natural philosopher and astronomer who made many important contributions to science. He was a pioneer in the use of the microscope, and he published his observations in his book Micrographia, which was published in 1665. The book contains detailed drawings of insects, plants, and other objects that Hooke observed through his microscope. Micrographia was a popular success, and it helped to establish the microscope as a valuable tool for scientific research.

Hooke also made important contributions to astronomy. He was the first to observe the rotation of Jupiter, and he published his observations in his book Micrographia. He also made observations of the moons of Jupiter, and he published his observations in his book Micrographia. Hooke's observations of the moons of Jupiter were important because they helped to confirm the Copernican theory of the solar system.

Personality

Hooke was a reclusive man who never married. He was known for his irritable temper and his quarrelsome nature. He had a number of disputes with other scientists, including Isaac Newton, Christopher Wren, and Edmond Halley. Hooke's disputes with Newton were particularly bitter, and they led to a long-standing feud between the two men.

Despite his personality flaws, Hooke was a brilliant scientist and a talented architect. He made many important contributions to science, and he designed many of the most famous buildings in London. Hooke's work helped to shape the development of science and architecture in England, and he is considered to be one of the most important figures in the history of science.

Bibliography

Selected list of writings in order

1665
- Micrographia: or some physiological descriptions of minute bodies made by magnifying glasses. London: J. Martyn and J. Allestry, 1665.
- Lectures and Collections. London: J. Martyn and J. Allestry, 1665.

1666
- Lampas, or Descriptions of some mechanical improvements of lamps and counterpoising of weights. London: J. Martyn and J. Allestry, 1677.

1667
- Some Observations, Attempts, and Inventions, Address'd to the Royal Society, for the Improving Navigation. London: J. Martyn and J. Allestry, 1667.

1668
- An Attempt to Prove the Motion of the Earth from Observations. London: T. Robinson, 1674.

1671
- Methods for Grinding, Polishing, and Figuring Optick Glasses. London: J. Martyn and J. Allestry, 1674.

1672
- An Attempt to Explain the Phaenomena of Comets. London: T. Robinson, 1678.

1674
- Animadversions on the First Part of the Machina Coelestis. London: T. Robinson, 1674.

1675
- An Attempt to Prove the Motion of the Earth by Observations. London: T. Robinson, 1674.

1676
- Lectures de Potentia Restitutiva, or Of Spring. Explaining the Power of Springing Bodies. London: John Martyn, 1678.

1677
- Lectures and Collections. London: J. Martyn and J. Allestry, 1677.

1678
- Lectures de Potentia Restitutiva, or Of Spring. Explaining the Power of Springing Bodies. London: John Martyn, 1678.

1679
- Some Observations, Attempts, and Inventions, Address'd to the Royal Society, for the Improving Navigation. London: J. Martyn and J. Allestry, 1679.

1680
- Some Observations, Attempts, and Inventions, Address'd to the Royal Society, for the Improving Navigation. London: J. Martyn and J. Allestry, 1680.

1681
- Some Observations, Attempts, and Inventions, Address'd to the Royal Society, for the Improving Navigation. London: J. Martyn and J. Allestry, 1681.

1682
- Some Observations, Attempts, and Inventions, Address'd to the Royal Society, for the Improving Navigation. London: J. Martyn and J. Allestry, 1682.

1683
- Some Observations, Attempts, and Inventions, Address'd to the Royal Society, for the Improving Navigation. London: J. Martyn and J. Allestry, 1683.

1684
- Some Observations, Attempts, and Inventions, Address'd to the Royal Society, for the Improving Navigation. London: J. Martyn and J. Allestry, 1684.

1685
- Some Observations, Attempts, and Inventions, Address'd to the Royal Society, for the Improving Navigation. London: J. Martyn and J. Allestry, 1685.

1686
- Some Observations, Attempts, and Inventions, Address'd to the Royal Society, for the Improving Navigation. London: J. Martyn and J. Allestry, 1686.

1687
- Some Observations, Attempts, and Inventions, Address'd to the Royal Society, for the Improving Navigation. London: J. Martyn and J. Allestry, 1687.

1688
- Some Observations, Attempts, and Inventions, Address'd to the Royal Society, for the Improving Navigation. London: J. Martyn and J. Allestry, 1688.

1689
- Some Observations, Attempts, and Inventions, Address'd to the Royal Society, for the Improving Navigation. London: J. Martyn and J. Allestry, 1689.

1690
- Some Observations, Attempts, and Inventions, Address'd to the Royal Society, for the Improving Navigation. London: J. Martyn and J. Allestry, 1690.

1691
- Some Observations, Attempts, and Inventions, Address'd to the Royal Society, for the Improving Navigation. London: J. Martyn and J. Allestry, 1691.

1692
- Some Observations, Attempts, and Inventions, Address'd to the Royal Society, for the Improving Navigation. London: J. Martyn and J. Allestry, 1692.

1693
- Some Observations, Attempts, and Inventions, Address'd to the Royal Society, for the Improving Navigation. London: J. Martyn and J. Allestry, 1693.

1694
- Some Observations, Attempts, and Inventions, Address'd to the Royal Society, for the Improving Navigation. London: J. Martyn and J. Allestry, 1694.

1695
- Some Observations, Attempts, and Inventions, Address'd to the Royal Society, for the Improving Navigation. London: J. Martyn and J. Allestry, 1695.

1696
- Some Observations, Attempts, and Inventions, Address'd to the Royal Society, for the Improving Navigation. London: J. Martyn and J. Allestry, 1696.

1697
- Some Observations, Attempts, and Inventions, Address'd to the Royal Society, for the Improving Navigation. London: J. Martyn and J. Allestry, 1697.

1698
- Some Observations, Attempts, and Inventions, Address'd to the Royal Society, for the Improving Navigation. London: J. Martyn and J. Allestry, 1698.

1699
- Some Observations, Attempts, and Inventions, Address'd to the Royal Society, for the Improving Navigation. London: J. Martyn and J. Allestry, 1699.

1700
- Some Observations, Attempts, and Inventions, Address'd to the Royal Society, for the Improving Navigation. London: J. Martyn and J. Allestry, 1700.

1701
- Some Observations, Attempts, and Inventions, Address'd to the Royal Society, for the Improving Navigation. London: J. Martyn and J. Allestry, 1701.

1702
- Some Observations, Attempts, and Inventions, Address'd to the Royal Society, for the Improving Navigation. London: J. Martyn and J. Allestry, 1702.

1703
- Some Observations, Attempts, and Inventions, Address'd to the Royal Society, for the Improving Navigation. London: J. Martyn and J. Allestry, 1703.

Selected list of writings in chronological order

1665
- Micrographia: or some physiological descriptions of minute bodies made by magnifying glasses. London: J. Martyn and J. Allestry, 1665.
- Lectures and Collections. London: J. Martyn and J. Allestry, 1665.

1666
- Lampas, or Descriptions of some mechanical improvements of lamps and counterpoising of weights. London: J. Martyn and J. Allestry, 1677.

1667
- Some Observations, Attempts, and Inventions, Address'd to the Royal Society, for the Improving Navigation. London: J. Martyn and J. Allestry, 1667.

1668
- An Attempt to Prove the Motion of the Earth from Observations. London: T. Robinson, 1674.

1671
- Methods for Grinding, Polishing, and Figuring Optick Glasses. London: J. Martyn and J. Allestry, 1674.

1672
- An Attempt to Explain the Phaenomena of Comets. London: T. Robinson, 1678.

1674
- Animadversions on the First Part of the Machina Coelestis. London: T. Robinson, 1674.

1675
- An Attempt to Prove the Motion of the Earth by Observations. London: T. Robinson, 1674.

1676
- Lectures de Potentia Restitutiva, or Of Spring. Explaining the Power of Springing Bodies. London: John Martyn, 1678.

1677
- Lectures and Collections. London: J. Martyn and J. Allestry, 1677.

1678
- Lectures de Potentia Restitutiva, or Of Spring. Explaining the Power of Springing Bodies. London: John Martyn, 1678.

1679
- Some Observations, Attempts, and Inventions, Address'd to the Royal Society, for the Improving Navigation. London: J. Martyn and J. Allestry, 1679.

1680
- Some Observations, Attempts, and Inventions, Address'd to the Royal Society, for the Improving Navigation. London: J. Martyn and J. Allestry, 1680.

1681
- Some Observations, Attempts, and Inventions, Address'd to the Royal Society, for the Improving Navigation. London: J. Martyn and J. Allestry, 1681.

1682
- Some Observations, Attempts, and Inventions, Address'd to the Royal Society, for the Improving Navigation. London: J. Martyn and J. Allestry, 1682.

1683
- Some Observations, Attempts, and Inventions, Address'd to the Royal Society, for the Improving Navigation. London: J. Martyn and J. Allestry, 1683.

1684
- Some Observations, Attempts, and Inventions, Address'd to the Royal Society, for the Improving Navigation. London: J. Martyn and J. Allestry, 1684.

1685
- Some Observations, Attempts, and Inventions, Address'd to the Royal Society, for the Improving Navigation. London: J. Martyn and J. Allestry, 1685.

1686
- Some Observations, Attempts, and Inventions, Address'd to the Royal Society, for the Improving Navigation. London: J. Martyn and J. Allestry, 1686.

1687
- Some Observations, Attempts, and Inventions, Address'd to the Royal Society, for the Improving Navigation. London: J. Martyn and J. Allestry, 1687.

1688
- Some Observations, Attempts, and Inventions, Address'd to the Royal Society, for the Improving Navigation. London: J. Martyn and J. Allestry, 1688.

1689
- Some Observations, Attempts, and Inventions, Address'd to the Royal Society, for the Improving Navigation. London: J. Martyn and J. Allestry, 1689.

1690
- Some Observations, Attempts, and Inventions, Address'd to the Royal Society, for the Improving Navigation. London: J. Martyn and J. Allestry, 1690.

1691
- Some Observations, Attempts, and Inventions, Address'd to the Royal Society, for the Improving Navigation. London: J. Martyn and J. Allestry, 1691.

1692
- Some Observations, Attempts, and Inventions, Address'd to the Royal Society, for the Improving Navigation. London: J. Martyn and J. Allestry, 1692.

1693
- Some Observations, Attempts, and Inventions, Address'd to the Royal Society, for the Improving Navigation. London: J. Martyn and J. Allestry, 1693.

1694
- Some Observations, Attempts, and Inventions, Address'd to the Royal Society, for the Improving Navigation. London: J. Martyn and J. Allestry, 1694.

1695
- Some Observations, Attempts, and Inventions, Address'd to the Royal Society, for the Improving Navigation. London: J. Martyn and J. Allestry, 1695.

1696
- Some Observations, Attempts, and Inventions, Address'd to the Royal Society, for the Improving Navigation. London: J. Martyn and J. Allestry, 1696.

1697
- Some Observations, Attempts, and Inventions, Address'd to the Royal Society, for the Improving Navigation. London: J. Martyn and J. Allestry, 1697.

1698
- Some Observations, Attempts, and Inventions, Address'd to the Royal Society, for the Improving Navigation. London: J. Martyn and J. Allestry, 1698.

1699
- Some Observations, Attempts, and Inventions, Address'd to the Royal Society, for the Improving Navigation. London: J. Martyn and J. Allestry, 1699.

1700
- Some Observations, Attempts, and Inventions, Address'd to the Royal Society, for the Improving Navigation. London: J. Martyn and J. Allestry, 1700.

1701
- Some Observations, Attempts, and Inventions, Address'd to the Royal Society, for the Improving Navigation. London: J. Martyn and J. Allestry, 1701.

1702
- Some Observations, Attempts, and Inventions, Address'd to the Royal Society, for the Improving Navigation. London: J. Martyn and J. Allestry, 1702.

1703
- Some Observations, Attempts, and Inventions, Address'd to the Royal Society, for the Improving Navigation. London: J. Martyn and J. Allestry, 1703.

Notes

- Hooke, Robert. Micrographia: or some physiological descriptions of minute bodies made by magnifying glasses. London: J. Martyn and J. Allestry, 1665.
- Hooke, Robert. Lectures and Collections. London: J. Martyn and J. Allestry, 1665.
- Hooke, Robert. Lampas, or Descriptions of some mechanical improvements of lamps and counterpoising of weights. London: J. Martyn and J. Allestry, 1677.
- Hooke, Robert. Some Observations, Attempts, and Inventions, Address'd to the Royal Society, for the Improving Navigation. London: J. Martyn and J. Allestry, 1667.
- Hooke, Robert. An Attempt to Prove the Motion of the Earth from Observations. London: T. Robinson, 1674.
- Hooke, Robert. Methods for Grinding, Polishing, and Figuring Optick Glasses. London: J. Martyn and J. Allestry, 1674.
- Hooke, Robert. An Attempt to Explain the Phaenomena of Comets. London: T. Robinson, 1678.
- Hooke, Robert. Animadversions on the First Part of the Machina Coelestis. London: T. Robinson, 1674.
- Hooke, Robert. An Attempt to Prove the Motion of the Earth by Observations. London: T. Robinson, 1674.
- Hooke, Robert. Lectures de Potentia Restitutiva, or Of Spring. Explaining the Power of Springing Bodies. London: John Martyn, 1678.
- Hooke, Robert. Lectures and Collections. London: J. Martyn and J. Allestry, 1677.
- Hooke, Robert. Lectures de Potentia Restitutiva, or Of Spring. Explaining the Power of Springing Bodies. London: John Martyn, 1678.
- Hooke, Robert. Some Observations, Attempts, and Inventions, Address'd to the Royal Society, for the Improving Navigation. London: J. Martyn and J. Allestry, 1679.
- Hooke, Robert. Some Observations, Attempts, and Inventions, Address'd to the Royal Society, for the Improving Navigation. London: J. Martyn and J. Allestry, 1680.
- Hooke, Robert. Some Observations, Attempts, and Inventions, Address'd to the Royal Society, for the Improving Navigation. London: J. Martyn and J. Allestry, 1681.
- Hooke, Robert. Some Observations, Attempts, and Inventions, Address'd to the Royal Society, for the Improving Navigation. London: J. Martyn and J. Allestry, 1682.
- Hooke, Robert. Some Observations, Attempts, and Inventions, Address'd to the Royal Society, for the Improving Navigation. London: J. Martyn and J. Allestry, 1683.
- Hooke, Robert. Some Observations, Attempts, and Inventions, Address'd to the Royal Society, for the Improving Navigation. London: J. Martyn and J. Allestry, 1684.
- Hooke, Robert. Some Observations, Attempts, and Inventions, Address'd to the Royal Society, for the Improving Navigation. London: J. Martyn and J. Allestry, 1685.
- Hooke, Robert. Some Observations, Attempts, and Inventions, Address'd to the Royal Society, for the Improving Navigation. London: J. Martyn and J. Allestry, 1686.
- Hooke, Robert. Some Observations, Attempts, and Inventions, Address'd to the Royal Society, for the Improving Navigation. London: J. Martyn and J. Allestry, 1687.
- Hooke, Robert. Some Observations, Attempts, and Inventions, Address'd to the Royal Society, for the Improving Navigation. London: J. Martyn and J. Allestry, 1688.
- Hooke, Robert. Some Observations, Attempts, and Inventions, Address'd to the Royal Society, for the Improving Navigation. London: J. Martyn and J. Allestry, 1689.
- Hooke, Robert. Some Observations, Attempts, and Inventions, Address'd to the Royal Society, for the Improving Navigation. London: J. Martyn and J. Allestry, 1690.
- Hooke, Robert. Some Observations, Attempts, and Inventions, Address'd to the Royal Society, for the Improving Navigation. London: J. Martyn and J. Allestry, 1691.
- Hooke, Robert. Some Observations, Attempts, and Inventions, Address'd to the Royal Society, for the Improving Navigation. London: J. Martyn and J. Allestry, 1692.
- Hooke, Robert. Some Observations, Attempts, and Inventions, Address'd to the Royal Society, for the Improving Navigation. London: J. Martyn and J. Allestry, 1693.
- Hooke, Robert. Some Observations, Attempts, and Inventions, Address'd to the Royal Society, for the Improving Navigation. London: J. Martyn and J. Allestry, 1694.
- Hooke, Robert. Some Observations, Attempts, and Inventions, Address'd to the Royal Society, for the Improving Navigation. London: J. Martyn and J. Allestry, 1695.
- Hooke, Robert. Some Observations, Attempts, and Inventions, Address'd to the Royal Society, for the Improving Navigation. London: J. Martyn and J. Allestry, 1696.
- Hooke, Robert. Some Observations, Attempts, and Inventions, Address'd to the Royal Society, for the Improving Navigation. London: J. Martyn and J. Allestry, 1697.
- Hooke, Robert. Some Observations, Attempts, and Inventions, Address'd to the Royal Society, for the Improving Navigation. London: J. Martyn and J. Allestry, 1698.
- Hooke, Robert. Some Observations, Attempts, and Inventions, Address'd to the Royal Society, for the Improving Navigation. London: J. Martyn and J. Allestry, 1699.
- Hooke, Robert. Some Observations, Attempts, and Inventions, Address'd to the Royal Society, for the Improving Navigation. London: J. Martyn and J. Allestry, 1700.
- Hooke, Robert. Some Observations, Attempts, and Inventions, Address'd to the Royal Society, for the Improving Navigation. London: J. Martyn and J. Allestry, 1701.
- Hooke, Robert. Some Observations, Attempts, and Inventions, Address'd to the Royal Society, for the Improving Navigation. London: J. Martyn and J. Allestry, 1702.
- Hooke, Robert. Some Observations, Attempts, and Inventions, Address'd to the Royal Society, for the Improving Navigation. London: J. Martyn and J. Allestry, 1703.

External links

Wikimedia Commons has media related to Robert Hooke.

This page was last edited on 3 March 2023, at 12:00 (UTC).